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		Sheet <u>1</u> of <u>6</u> JUL 03 2002 TECH CENTER 1600/2900	
FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	
INFORMATIONAL DISCLOSURE STATEMENT (Use several sheets if necessary)		ATTY. DOCKET NO. 660088.435C2	APPLICATION NO. 10/083,815
		APPLICANTS Christen M. Anderson and William Clevenger	
		FILING DATE February 27, 2002	GROUP ART UNIT 1614

U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>mm</i>	AA	5,296,429	03/22/94	Marsh et al.	502	101	
	AB	5,670,617	09/23/97	Frankel et al.	530	300	
	AC	5,674,980	10/07/97	Frankel et al.	530	350	
	AD	5,741,657	04/21/98	Tsien et al.	435	18	
	AE	5,747,641	05/05/98	Frankel et al.	530	300	
	AF	5,804,604	09/08/98	Frankel et al.	530	324	
	AG	5,906,923	05/25/99	Hillman	435	69.1	
<i>mm</i>	AH	6,140,067	10/31/00	Anderson et al.	435	26	
	AI						

FOREIGN PATENT DOCUMENTS						
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
<i>mm</i>	AJ	WO 98/17826	04/30/98	WIPO		
	AK	WO 98/33909	08/06/98	WIPO		
<i>mm</i>	AL	WO 00/28041	05/18/00	WIPO		
	AM					

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
<i>mm</i>	AN	Arakawa et al., "The NH ₂ -Terminal 14-16 Amino Acids of Mitochondrial and Bacterial Thiolases Can Direct Mature Ornithine Carbamoyltransferase into Mitochondria," <i>J. Biochem., Tokyo</i> , 107(1):160-164, January 1990.
	AO	Arya et al., "New Human and Simian HIV-Related Retroviruses Possess Functional Transactivator (tat) Gene," <i>Nature</i> 328(6130):548-550, August 6, 1987.
	AP	Badminton et al., "Differential Regulation of Nuclear and Cytosolic Ca ²⁺ in HeLa Cells," <i>J. Biol. Chem.</i> 271(49):31210-31214, December 6, 1996.
<i>mm</i>	AQ	Balzan et al., "Escherichia Coli Iron Superoxide Dismutase Targeted to the Mitochondria of Yeast Cells Protects the Cells Against Oxidative Stress," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 92(10):4219-4223, May 9, 1995.

EXAMINER <i>mm</i>	DATE CONSIDERED 9/26/03
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* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).



FORM PTO-144
(REV. 7-80)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
660088.435C2

APPLICATION NO.
10/083,815

Sheet 2 of 6

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BA						

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			YES	NO
BB				

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mm2	BC	Button et al., "Aequorin Targeted to the Endoplasmic Reticulum Reveals Heterogeneity in Luminal Ca ⁺⁺ Concentration and Reports Agonist- or IP ₃ -Induced Release of Ca ⁺⁺ ," <i>Molecular Biology of the Cell</i> 7(3):419-434, March 1996.
	BD	Carroll et al., "Identification of Lentivirus Tat Functional Domains through Generation of Equine Infectious Anemia Virus/Human Immunodeficiency Virus Type 1 tat Gene Chimeras," <i>J. Virol.</i> 65(7):3460-3467, July 1991.
	BE	Chakrabarti et al., "Sequence of Simian Immunodeficiency Virus from Macaque and its Relationship to other Human and Simian Retroviruses," <i>Nature</i> 328(6130):543-547, August 6, 1987.
	BF	Creissen et al., "Simultaneous Targeting of Pea Glutathione Reductase and of a Bacterial Fusion Protein to Chloroplasts and Mitochondria in Transgenic Tobacco," <i>The Plant Journal</i> 8(2):167-175, August 1995.
	BG	Daguzan et al., "Expression of Membrane Targeted Aequorin in <i>Xenopus Laevis</i> Oocytes," <i>Int. J. Dev. Biol.</i> 39(4):653-657, August 1995.
	BH	Daniell et al., "Containment of Herbicide Resistance Through Genetic Engineering of the Chloroplast Genome," <i>Nature Biotechnology</i> 16:345-348, April 1998.
	BI	Derossi et al., "Trojan Peptides: The Penetratin System for Intracellular Delivery," <i>Trends Cell Biol.</i> 8(2):84-87, February 1998.
	BJ	Frankel et al., "Activity of Synthetic Peptides From the Tat Protein of Human Immunodeficiency Virus Type 1," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 86(19):7397-7401, October 1989.
mm2	BK	Guyader et al., Genome Organization and Transactivation of the Human Immunodeficiency Virus Type 2" <i>Nature</i> 326(6114):662-669, April 16, 1987.

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FORM PTO-1449
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CA						

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			YES	NO
CB				

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

mm	CC	Higuti et al., "Molecular Cloning and Sequence of cDNAs for the Import Precursors of Oligomycin Sensitivity Conferring Protein, ATPase Inhibitor Protein, and Subunit C of H ⁺ -ATP Synthase in Rat Mitochondria," <i>Biochim. Biophys. Acta</i> 1172(3):311-314, 1993.
	CD	Huang et al., "A Yeast Mitochondrial Leader Peptide Functions in Vivo as a Dual Targeting Signal for Both Chloroplasts and Mitochondria," <i>The Plant Cell</i> 2(12):1249-1260, December 1990.
	CE	Jackson et al., "The Mitochondrial ATP Synthase Inhibitor Protein Binds Near the C-Terminus of the F ₁ β -Subunit," <i>FEBS Lett.</i> 229(1):224-228, February 1988.
	CF	Kendall et al., "Targeting Aequorin to the Endoplasmic Reticulum of Living Cells," <i>Biochem. Biophys. Res. Commun.</i> 189(2):1008-1016, December 15, 1992.
	CG	Kishimoto et al., "Diabetes Mellitus Carrying a Mutation in the Mitochondrial tRNA ^{Leu(UUR)} Gene," <i>Diabetologia</i> 38(2):193-200, February 1995.
	CH	Kumamoto et al., "Critical Region in the Extension Peptide for the Import of Cytochrome P-450(SCC) Precursor into Mitochondria," <i>J. Biochem., Tokyo</i> , 105(1):72-78, January 1989.
	CI	Lebowitz et al., "Regulation of the Mitochondrial ATP Synthase/ATPase Complex: cDNA Cloning, Sequence, Overexpression, and Secondary Structural Characterization of a Functional Protein Inhibitor," <i>Arch. Biochem. Biophys.</i> 301(1):64-70, February 15, 1993.
	CJ	Llopis et al., "Measurement of Cytosolic, Mitochondrial, and Golgi pH in Single Living Cells With Green Fluorescent Proteins," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95(12):6803-6808, June 9, 1998
	CK	Madueño et al., "The Thylakoid-Targeting Domain of the Chloroplast Rieske Iron-Sulfur Protein Is Located in the N-terminal Hydrophobic Region of the Mature Protein," <i>J. Biol. Chem.</i> 269(26):17458-17463, July 1, 1994.
mm	CL	Mahajan et al., "Bcl-2 and Bax Interactions in Mitochondria Probed with Green Fluorescent Protein and Fluorescence Resonance Energy Transfer," <i>Nature Biotechnology</i> 16:547-552, June 1998.

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				YES	NO
DB					

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mm	DC	Marsault et al., "Domains of High Ca^{2+} Beneath the Plasma Membrane of Living A7r5 Cells," <i>EMBO J.</i> 16(7):1575-1581, April 1, 1997.
	DD	Matschinsky, "A Lesson in Metabolic Regulation Inspired by the Glucokinase Glucose Sensor Paradigm," <i>Diabetes</i> 45(2):223-241, February 1996.
	DE	Mimura et al., "Binding of an Intrinsic ATPase Inhibitor to the Interface Between α - and β -Subunits of $\text{F}_1\text{FoATPase}$ upon De-Energization of Mitochondria," <i>J. Biochem.</i> 113(1):350-354, January 1993.
	DF	Newgard et al., "Metabolic Coupling Factors in Pancreatic β -Cell Signal Transduction," <i>Annu. Rev. Biochem.</i> 64:689-719, 1995.
	DG	Pinton et al., "New Light on Mitochondrial Calcium," <i>Biofactors</i> 8(3-4):243-253, 1998.
	DH	Prescott et al., "A Novel Fluorescent Marker for Assembled Mitochondria ATP Synthase of Yeast," <i>FEBS Letts.</i> 411(1):97-101, 1997.
	DI	Pullman et al., "A Naturally Occurring Inhibitor of Mitochondrial Adenosine Triphosphatase," <i>J. Biol. Chem.</i> 238(11):3762-3769, November 1963.
	DJ	Rasschaert et al., "Hexose Metabolism in Pancreatic Islets: Preferential Utilization of Mitochondrial ATP for Glucose Phosphorylation," <i>Biochim. Biophys. Acta</i> 1015(2):353-360, 1990.
	DK	Rizzuto et al., "Rapid Changes of Mitochondrial Ca^{2+} Revealed by specifically Targeted Recombinant Aequorin," <i>Nature</i> 358(6384):325-327, July 23, 1992.
	DL	Rouslin et al., "Analysis of Factors Affecting Functional Assays for Estimating IF_1 , the Mitochondrial ATPase Inhibitor," <i>Anal. Biochem.</i> 222(1):68-75, October 1994.
	DM	Schwarze et al., "In Vivo Protein Transduction: Intracellular Delivery of Biologically Active Proteins, Compounds and DNA," <i>Trends Pharmacol. Sci.</i> 21(2):45-48, February 2000.
	DN	Schwarze et al., "Protein Transduction: Unrestricted Delivery Into All Cells?," <i>Trends Cell Biol.</i> 10(7):290-295, July 2000.
mm	DO	Service, "Chemical Tags Speed Delivery Into Cells," <i>Science</i> 288:28-29, April 7, 2000.

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EA							
FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY			TRANSLATION YES NO	
EB							
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mm	EC	Solaini et al., "Modification of the Mitochondrial F ₁ -ATPase e Subunit, Enhancement of the ATPase activity of the IF ₁ -F ₁ Complex and IF ₁ -Binding Dependence of the Conformation of the e Subunit," <i>Biochem J.</i> 327(2):443-448, October 15, 1997.					
	ED	Steele et al., "Expression of a Recoded Nuclear Gene Inserted Into Yeast Mitochondrial DNA Is Limited by mRNA-Specific Translational Activation," <i>Proc. Natl. Acad. Sci. USA</i> 93(11):5253-5257, May 28, 1996.					
	EE	Stoltz et al. "Covalent Attachment of FAD Derivatives to a Fusion Protein Consisting of 6-Hydroxy-D-Nicotine Oxidase and a Mitochondrial Presequence," <i>J. Biol. Chem.</i> 271(41):25208-25212, October 11, 1996.					
	EF	Sue et al., "Mitochondrial Gene Mutations and Diabetes Mellitus," <i>Lancet</i> 341(8843):437-438, February 13, 1993.					
	EG	Sui et al., "Structural Determinants for the Intracellular Localization of the Isozymes of Mammalian Hexokinase: Intracellular Localization of Fusion Constructs Incorporating Structural Elements from the Hexokinase Isozymes and the Green Fluorescent Protein," <i>Arch. Biochem. Biophys.</i> 345(1):111-125, September 1, 1997.					
	EH	Tuena de Gómez-Puyou et al., "Synthesis and Hydrolysis of ATP by the Mitochondrial ATP Synthase ^{1,2} ," <i>Biochem. Cell Biol.</i> 66(7):677-682, July 1988.					
	EI	van den Ouweland et al., "Mutation in Mitochondrial tRNA ^{Leu(UUR)} Gene in a large Pedigree with Maternally Transmitted Type II Diabetes Mellitus and Deafness," <i>Nature Genetics</i> 1:368-371, August 1992.					
	EJ	van Raaij et al., "The Structure of Bovine F ₁ -ATPase Complexed with the Antibiotic Inhibitor Aurovertin B," <i>Proc. Natl. Acad. Sci. USA</i> 93(14):6913-6917, July 9, 1996.					
	EK	Walker et al., "Structural Analysis of ATP Synthase from Bovine Heart Mitochondria," <i>Methods in Enzymology</i> 260:163-190, 1995.					
mm	EL	Walker et al., "ATP Synthase from Bovine Mitochondria: Sequences of Imported Precursors of Oligomycin Sensitivity Conferral Protein, Factor 6, and Adenosinetriphosphatase Inhibitor Protein," <i>Biochem.</i> 26:8613-8619, December 29, 1987.					
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<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 2px solid black; border-radius: 50%; padding: 10px; text-align: center; margin-right: 10px;"> PTO INFORMATION DISCLOSURE STATEMENT <small>(Use several sheets if necessary)</small> JUL 01 2002 </div> <div> INFORMATION DISCLOSURE STATEMENT <small>(Use several sheets if necessary)</small> </div> </div>				APPLICANTS Christen M. Anderson and William Clevenger			
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	FK						
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OTHER PRIOR ART <small>(Including Author, Title, Date, Pertinent Pages, Etc.)</small>							
mm	FN	Walker et al., "The Role of the Stalk in the Coupling Mechanism of F ₁ F ₀ -ATPases," <i>FEBS Lett.</i> 346(1):39-43, 1994.					
	FO	Wu et al., "Identification of an Uncleavable Targeting Signal in the 10-Kilodalton Spinach Chloroplast Outer Envelope Membrane Protein," <i>J. Biol. Chem.</i> 268(26):19384-19391, September 15, 1993.					
	FP	Yasuda et al., "Adenovirus E1B-19K/BCL-2 Interacting Protein BNIP3 Contains a BH3 Domain and a Mitochondrial Targeting Sequence," <i>J. Biol. Chem.</i> 273(20):12415-12421, May 15, 1998.					
mm	FQ	Zhang et al., "Photosensitisation Properties of Mitochondrially Localised Green Fluorescent Protein," <i>Biochem. Biophys. Res. Commun.</i> 242(2):390-395, January 14, 1998.					
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